

Serial No. 09/684,361 Docket No. 210121.465C2

Inventor(s): Alexander Gaiger et al.

Express Mail No. EV741777884US "REPLACEMENT SHEET"



HU: MGS D V R D L N A L L P A V P S L G G G G C A L P V S G A A Q W A P V L D F A P P G A S A Y G S L
MO: MGS D V R D L N A L L P A V S S L G G G G C G L P V S G A A Q W A P V L D F A P P G A S A Y G S L

HU: G G P A P P P A P P P P P P P P H S F I K Q E P S W G G A E P H E E Q C L S A F T V H F S G Q F T G T A G
MO: G G P A P P P A P P P P P P P P H S F I K Q E P S W G G A E P H E E Q C L S A F T L H F S G Q F T G T A G

HU: A C R Y G P F G P P P S Q A S S G Q A R M F P N A P Y L P S C L E S Q P A I R N Q Y S T V T F D G T P S
MO: A C R Y G P F G P P P S Q A S S G Q A R M F P N A P Y L P S C L E S Q P T I R N Q Y S T V T F D G A P S

HU: Y G H T P S H A A Q F P N H S F K H E D P M G Q Q G S L G E Q Q Y S V P P P V Y G C H T P T D S C T G
MO: Y G H T P S H A A Q F P N H S F K H E D P M G Q Q G S L G E Q Q Y S V P P P V Y G C H T P T D S C T G

HU: S Q A L L L R T P Y S S D N L Y Q M T S Q L E C M T W N Q M N L G A T L K G V A A G S S S V K W T E
MO: S Q A L L L R T P Y S S D N L Y Q M T S Q L E C M T W N Q M N L G A T L K G M A A G S S S V K W T E

HU: G Q S N H S T G Y E S D N H T P I L C G A Q Y R I H T H G V F R G I Q D V R R V P G V A P T L V R S A S
MO: G Q S N H G I G Y E S D N H T A P I L C G A Q Y R I H T H G V F R G I Q D V R R V S G V A P T L V R S A S

HU: E T S E K R P F M C A Y P G C N K R Y F K L S H L Q M H S R K H T G E K P Y Q C D F K D C E R R F S R
MO: E T S E K R P F M C A Y P G C N K R Y F K L S H L Q M H S R K H T G E K P Y Q C D F K D C E R R F S R

HU: S D Q L K R H Q R R H T G V K P F Q C K T C Q R K F S R S D H L K T H T R T H T G K T S E K P F S C R
MO: S D Q L K R H Q R R H T G V K P F Q C K T C Q R K F S R S D H L K T H T R T H T G K T S E K P F S C R

HU: W P S C Q K K F A R S D E L V R H H N M H Q R N M T K L Q L A L
MO: W H S C Q K K F A R S D E L V R H H N M H Q R N M T K L H V A L

Fig. 1



Fig. 2

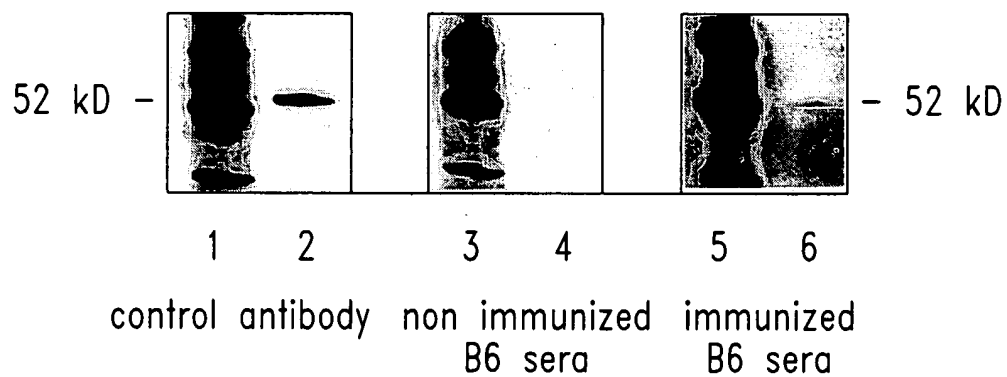


Fig. 3

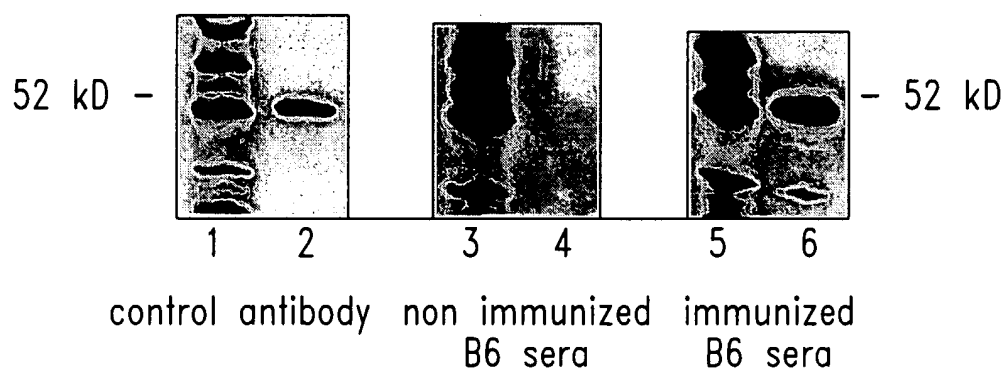


Fig. 4

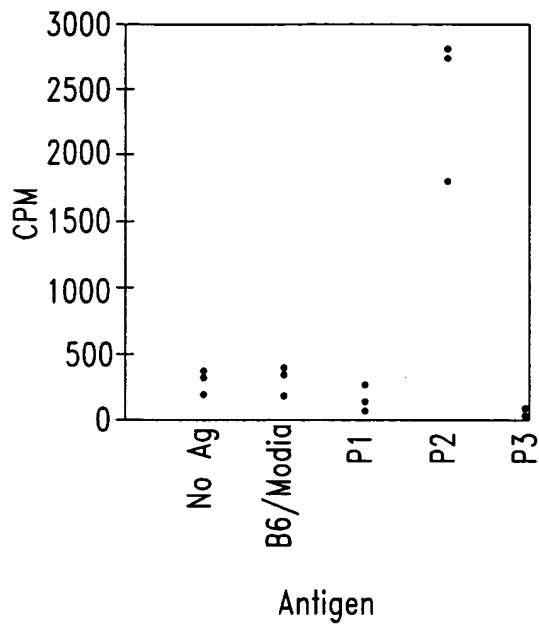


Fig. 5A

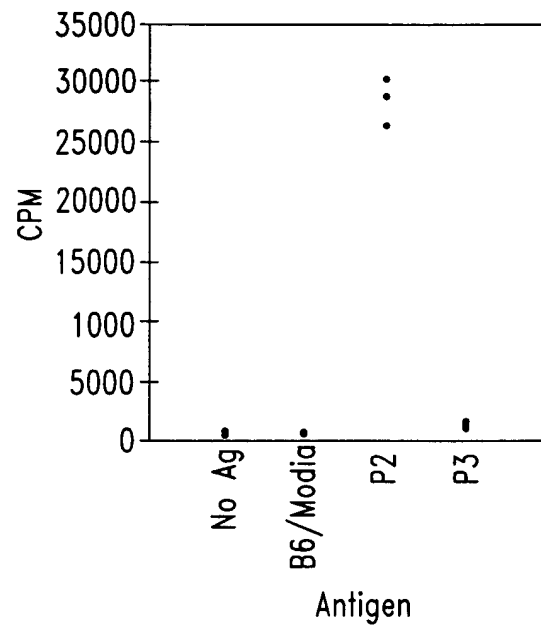


Fig. 5B

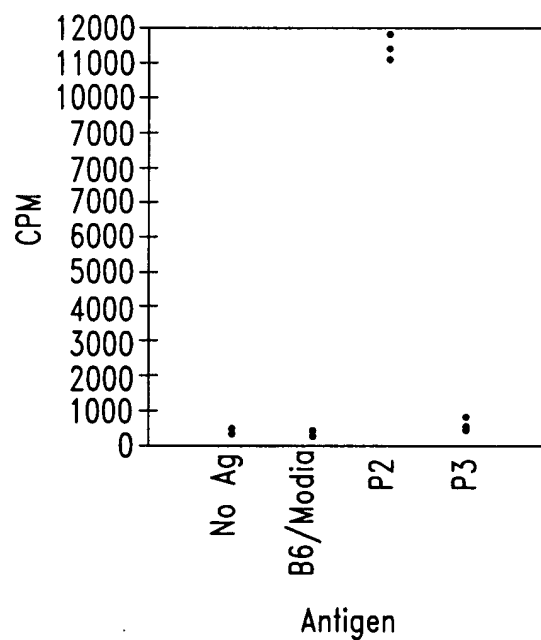


Fig. 5C

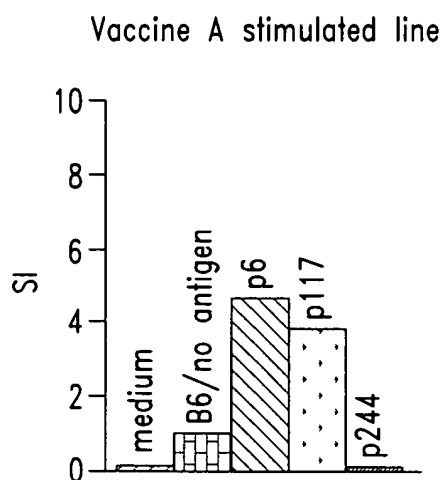


Fig. 6A

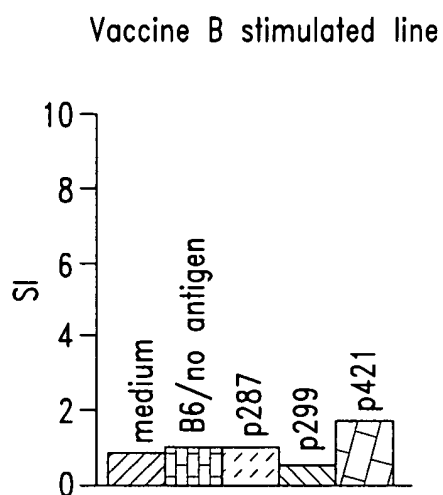


Fig. 6B

p117-139 stimulated line

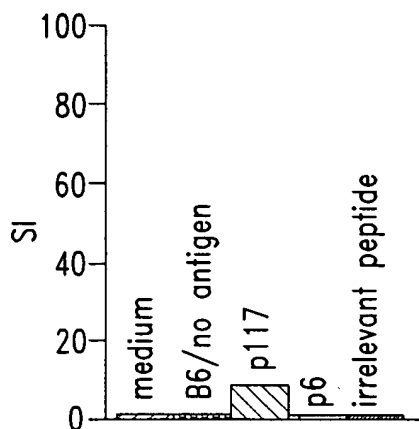


Fig. 7A

p117-139 stimulated clone

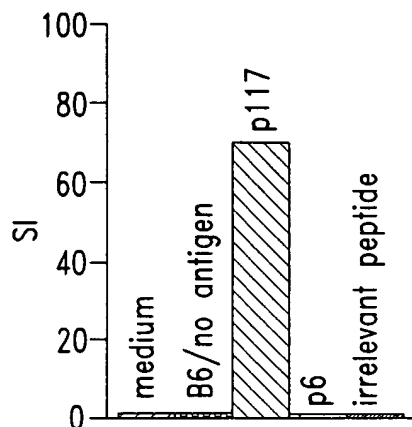


Fig. 7B

p6-22 stimulated line

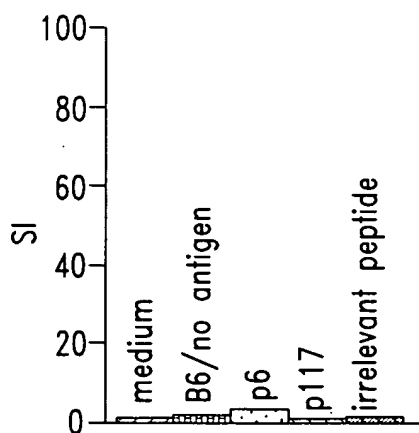


Fig. 7C

p6-22 stimulated clone

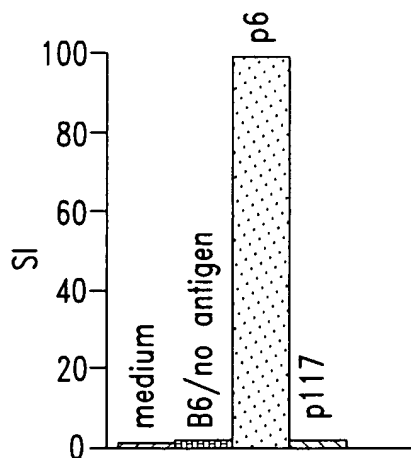


Fig. 7D

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
MGSDVRDLNALLPAVPSLGGGGGCGALPVSGAAQWAPVLDFAAPPASAYGSLGGPAPPAPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAA.....
.....RRRR.....
.....
.....

80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEQCLSAFTVHFSGQFTGTAGACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYS
.....AAA.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGTSPSYGHTPSHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDCTGSQALLRTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDD.....
.....

230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLCMTWNQMNLGATLKGVAAGSSSVKWTGQSNHSTGYESDNHTPILCGAQYRIHTGHVFRGIQDV
AAAAAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDD.....
.....dddd.....

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVPGVAPTLVRSASETSEKRPFMCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSRSDQLKRHR
AAAAA.AAAAAAAAAA.....AAAA.AAAAAAAAAA
.....RRRRR.....RRRR.....
.....DDDDDD.....
.....

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCORKFSRSDHLKTHTRTHTGKTSEKPFSCRWPSCQKKFARSDLVRRHHNMHQNMTKLQLAL
.....AAAA.AAAA.AA.....AAAA.....AAA.....AAAAA.....AAA.....
.....RRRR.RRRR.....
.....
.....dddddddddd.....

Fig. 8A

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
MGSDVRDLNALLPAVSSLGGGGGCLPVSGAAQWAPVLDFAAPPASAYGSLGGPAPPAPPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....
.....
.....

80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
PSWGGAEPEEQCLSAFTLHFSGQFTGTAGACRYGPGPPPSQASSGQARMFPNAPYLPSCLSQPTIRNQYS
.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....
.....

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGAPSYGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDCTGSQALLLRTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDD.....
.....
.....

230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECMTNQMNLGATLKGMAAGSSSVKWTGQSNHGIGYESDNHTAPILCGAQYRIHTGVFRGIQDV
AAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDD.....
.....dddd.....

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVSGVAPTLVRSASETSEKRPFCAYPGCNKRYFKLSHLQMHSRKHTGEKPYQCDFKDCERRFSRSDQLKRHR
AAAAA.....AAAAA.....AAAA.AAAAAA.
.....RRRR.....RRRR.....
.....DDDDDDDDDD.....
.....
.....

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRSDHLKTHTRHTGKTSEKPFSCRWHSQKKFARSDELVRHHNMHQRNMTKLHVAL
.....AAAA.AAAA.AA.....AAAA.....AA.....AAAAA.....AAAA.....
.....RRRR.....RRRR.....
.....dddddddddd.....
.....
.....

Fig. 8B

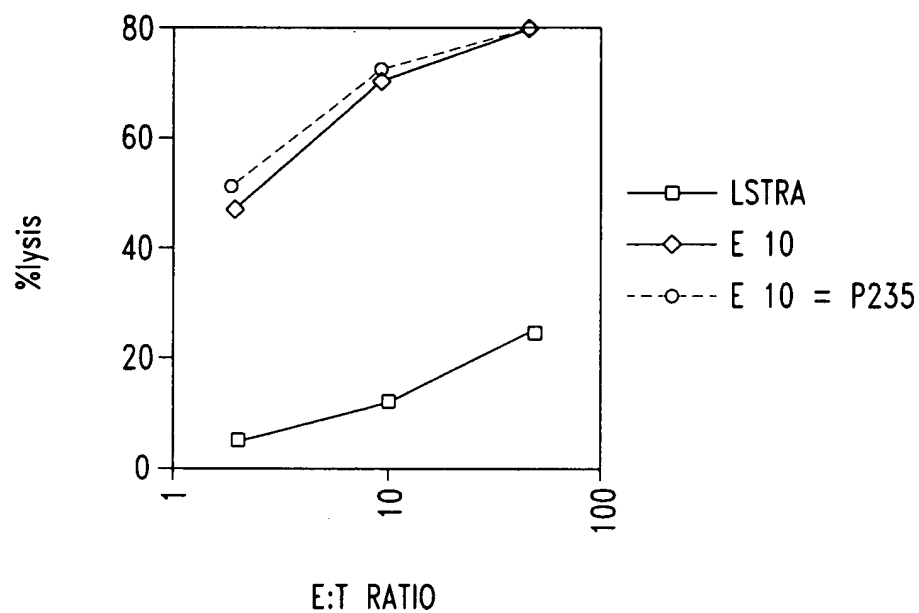


Fig. 9A

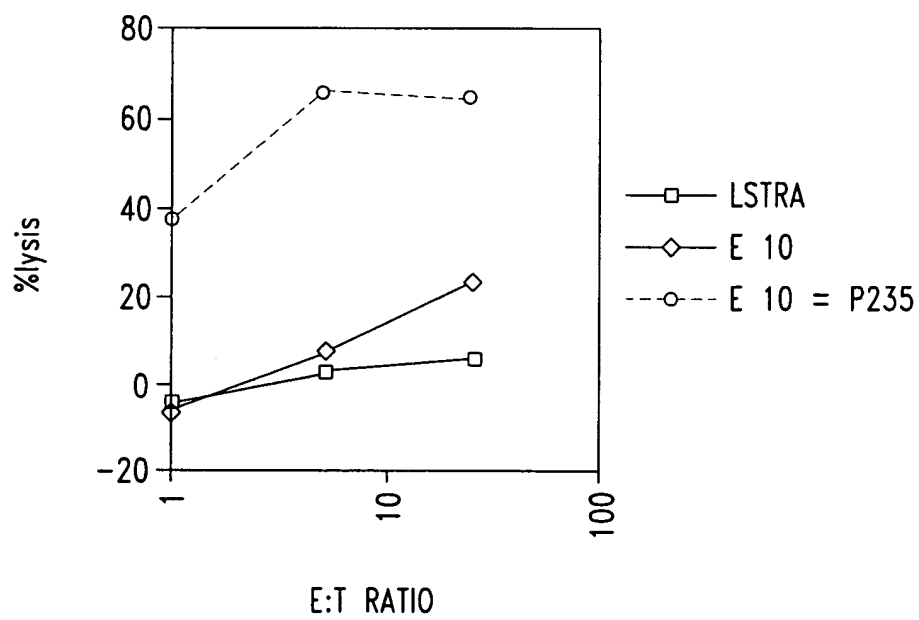


Fig. 9B

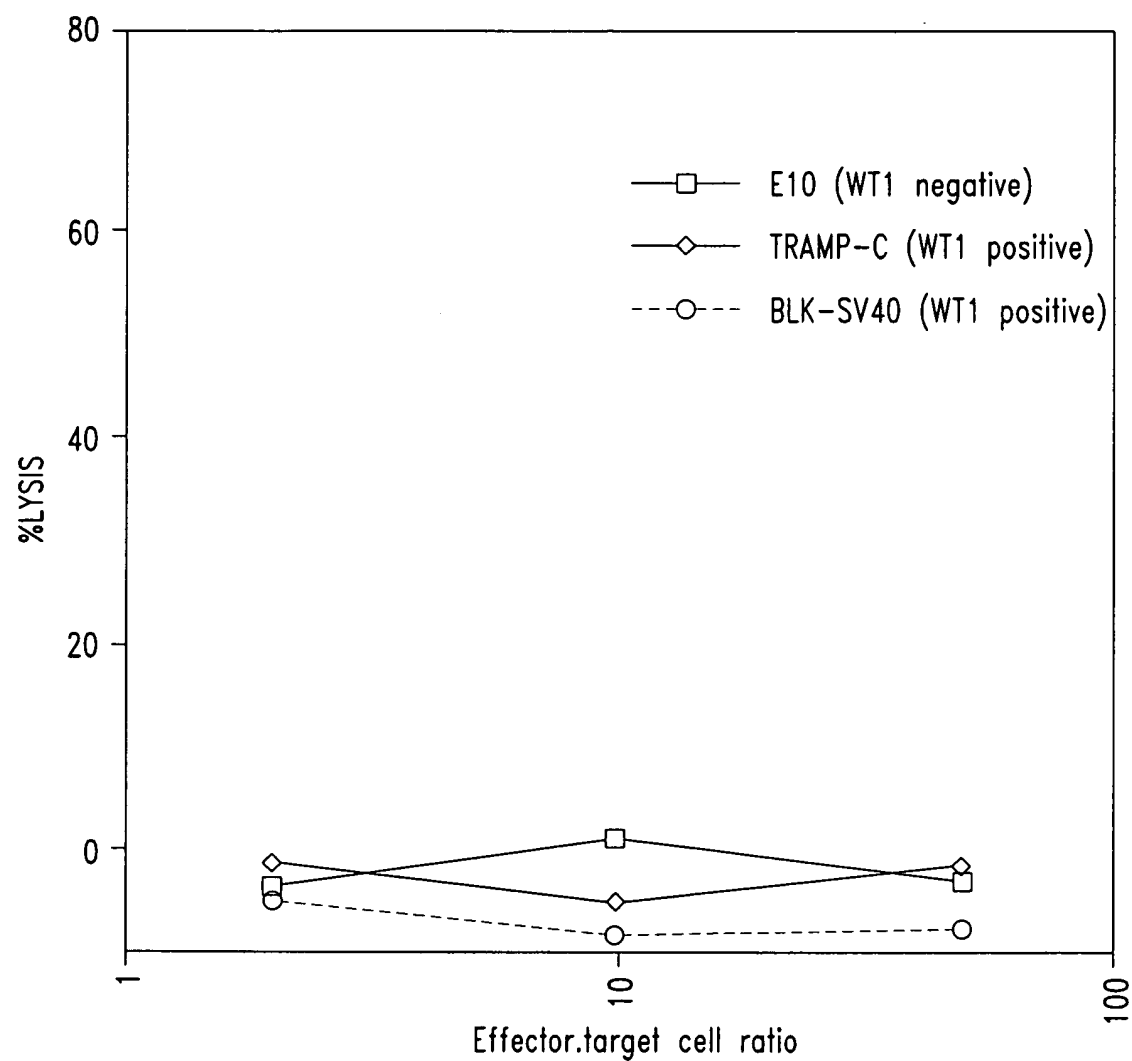


Fig. 10A

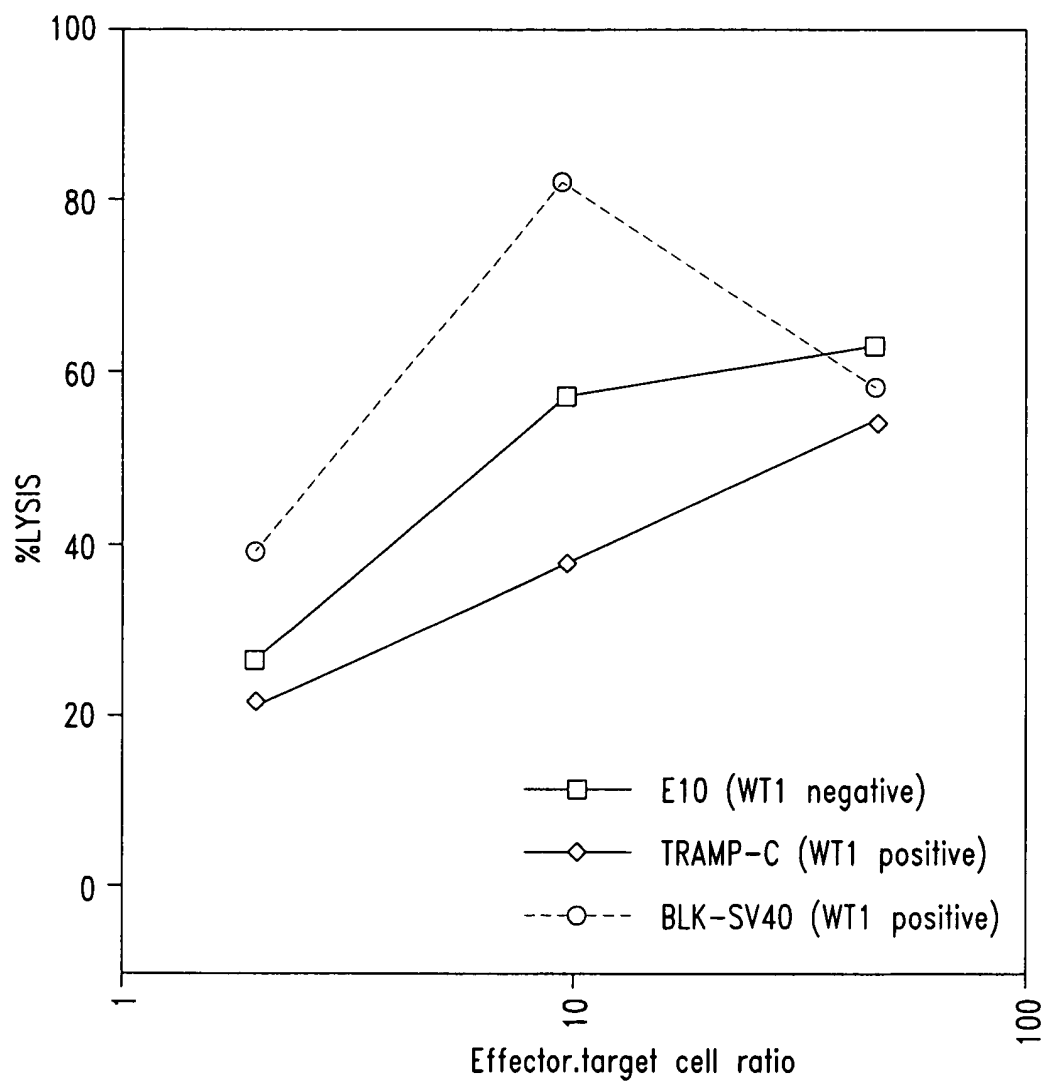


Fig. 10B

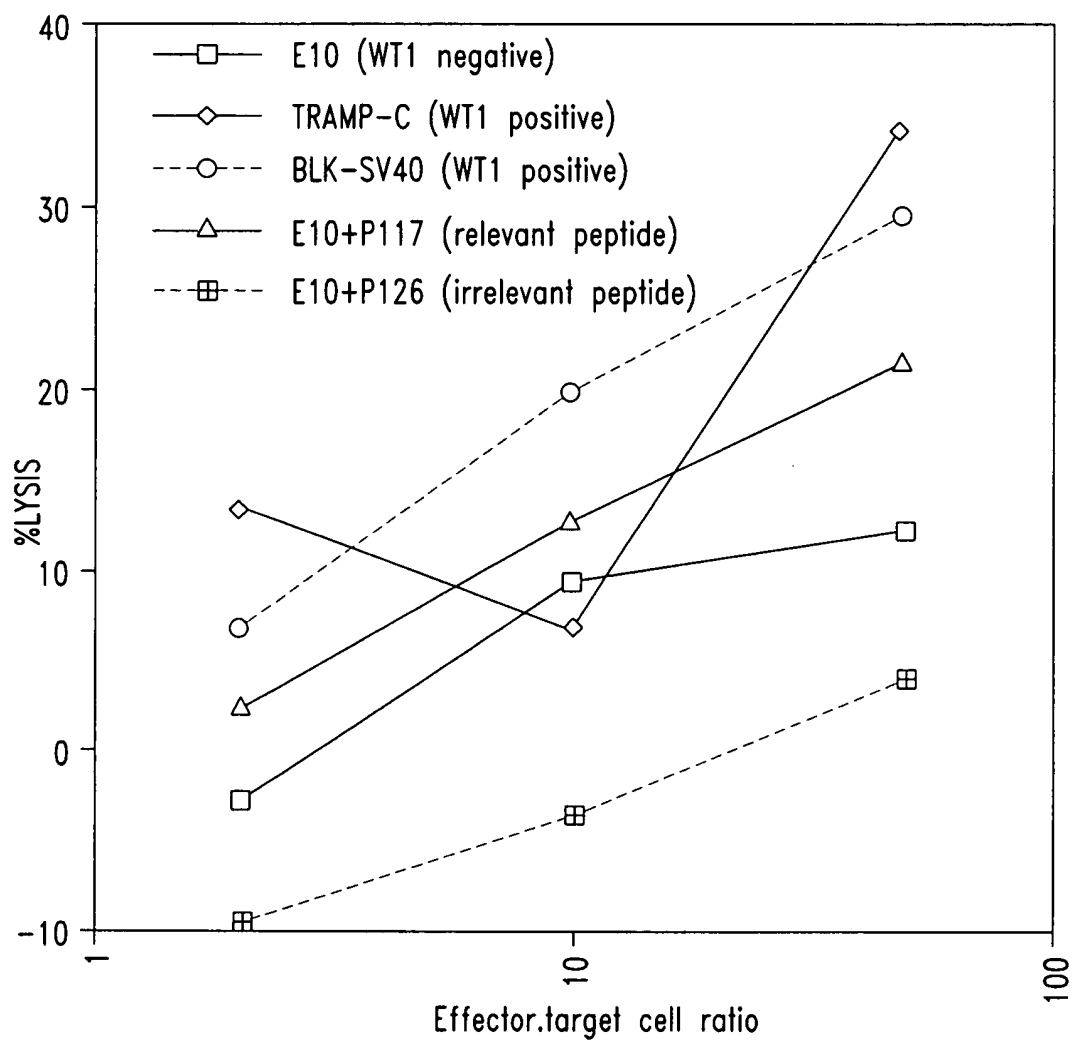


Fig. 10C

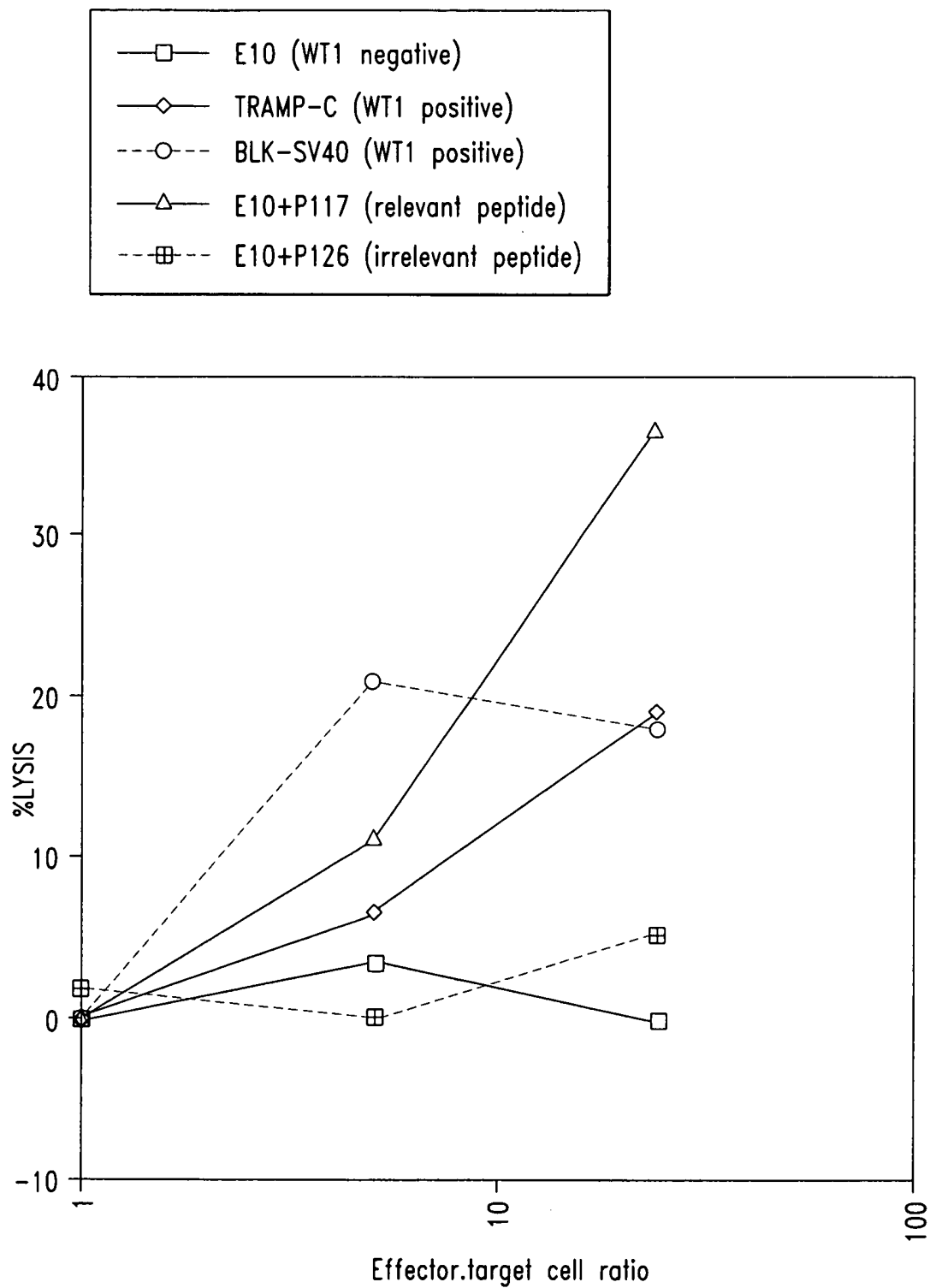


Fig. 10D

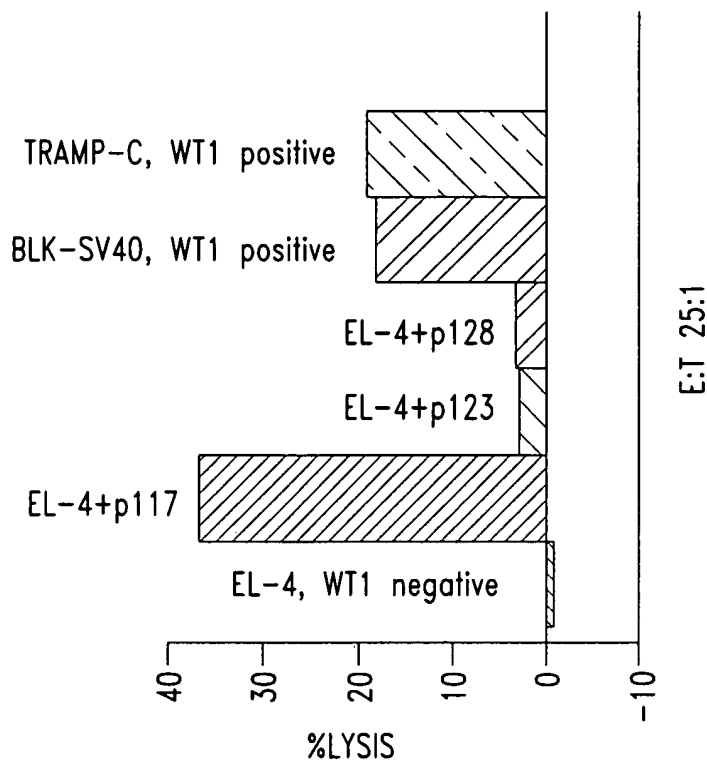


Fig. 11B

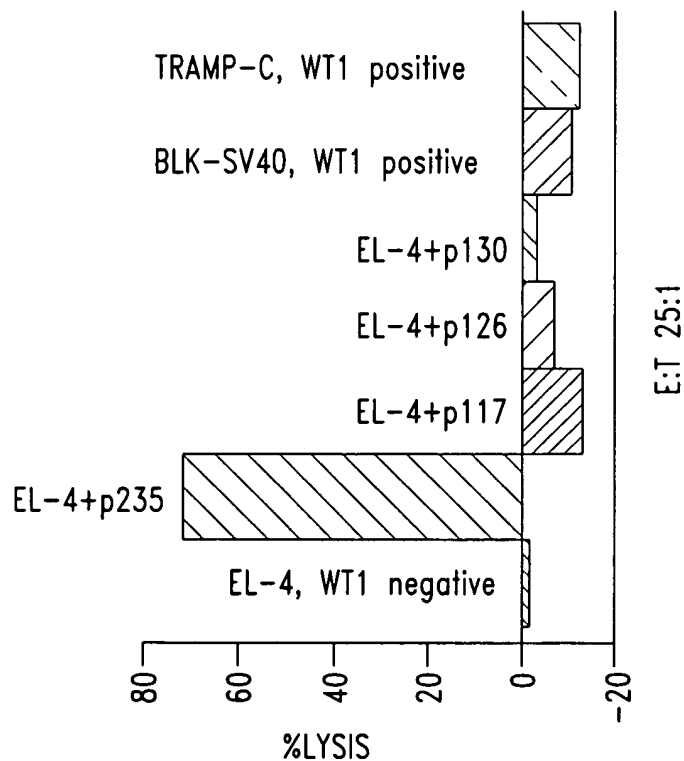
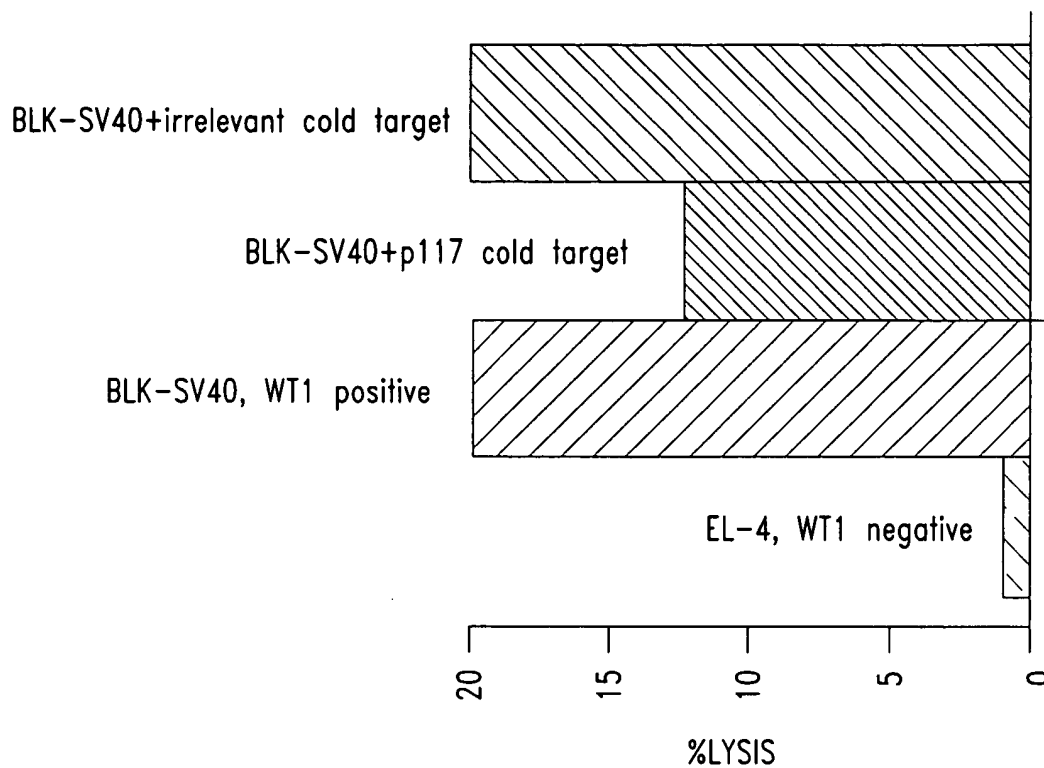
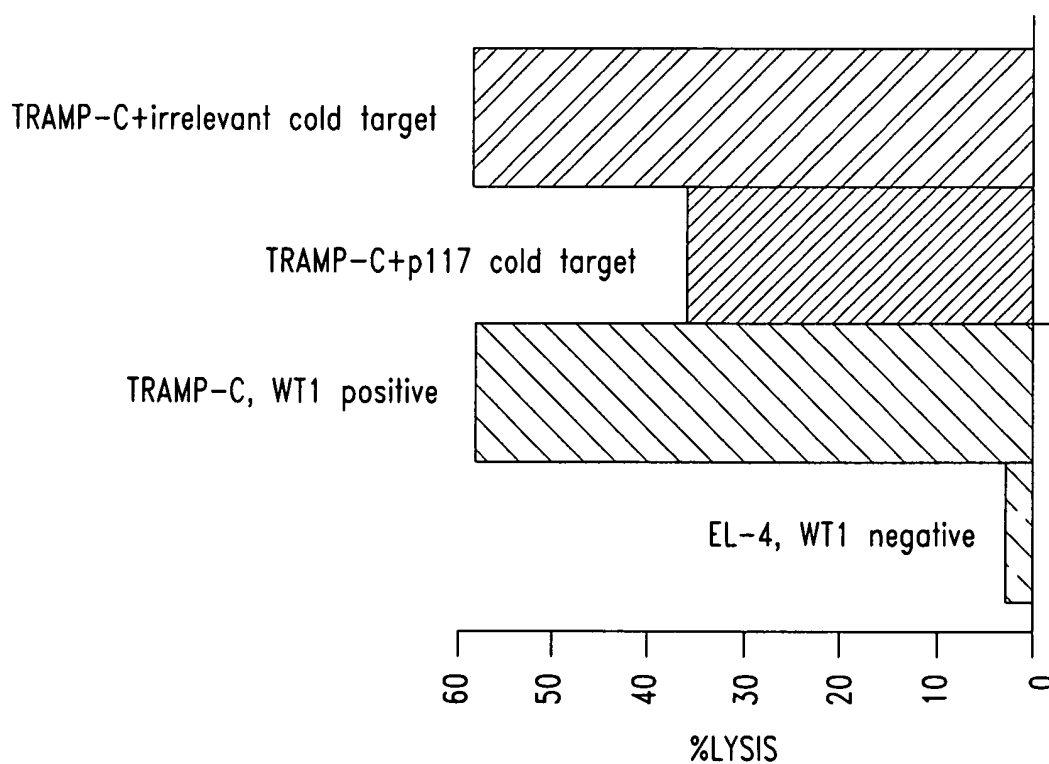


Fig. 11A



E:T 25:1
Fig. 12B



E:T 25:1
Fig. 12A

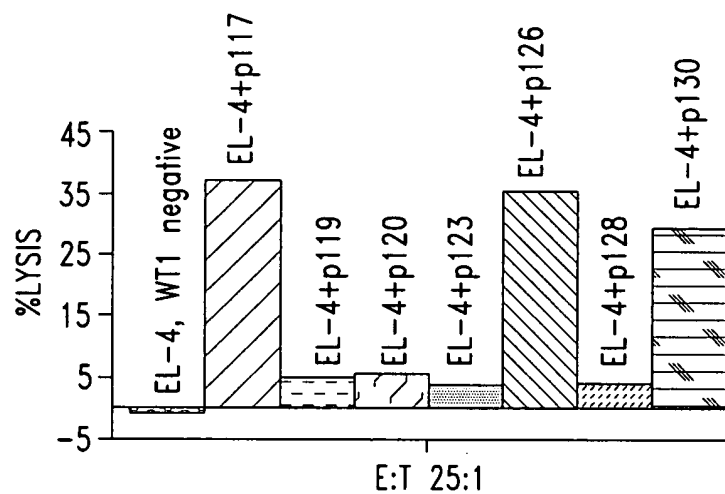


Fig. 13A

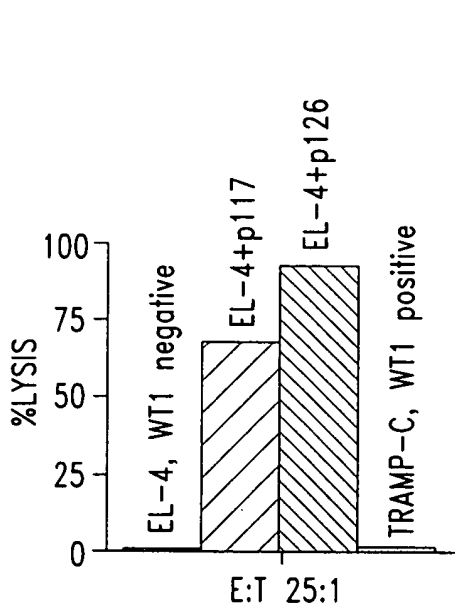


Fig. 13B

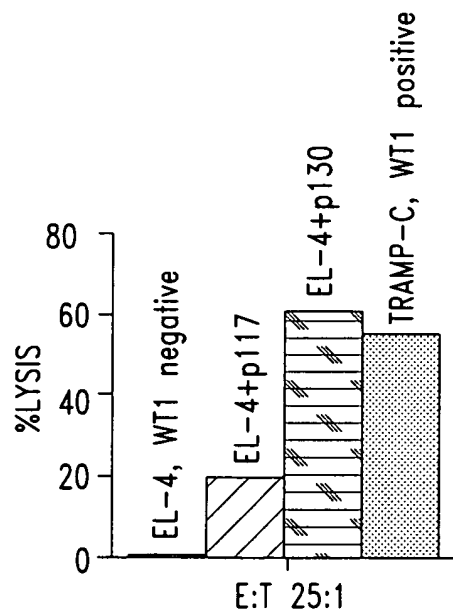


Fig. 13C

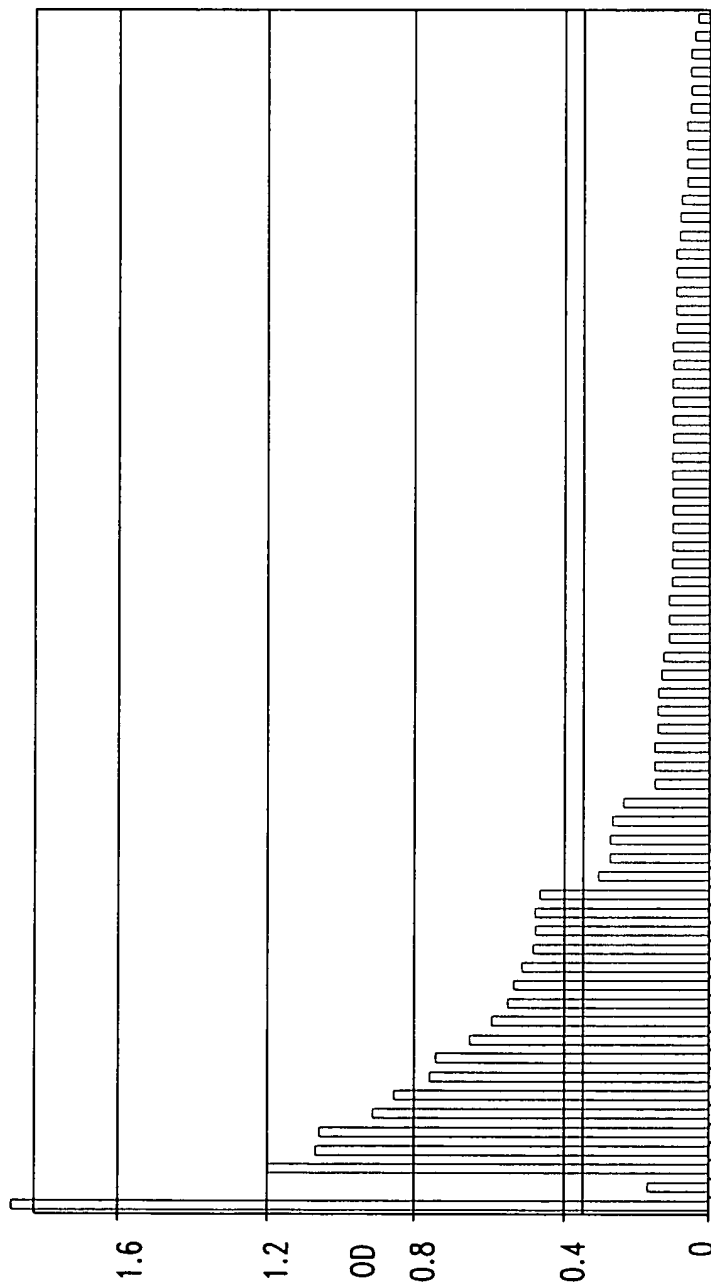


Fig. 14

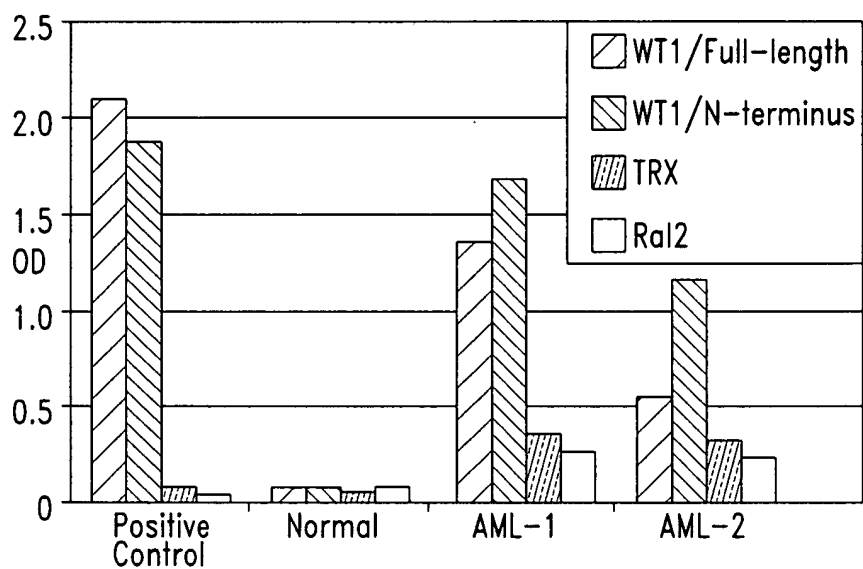


Fig. 15

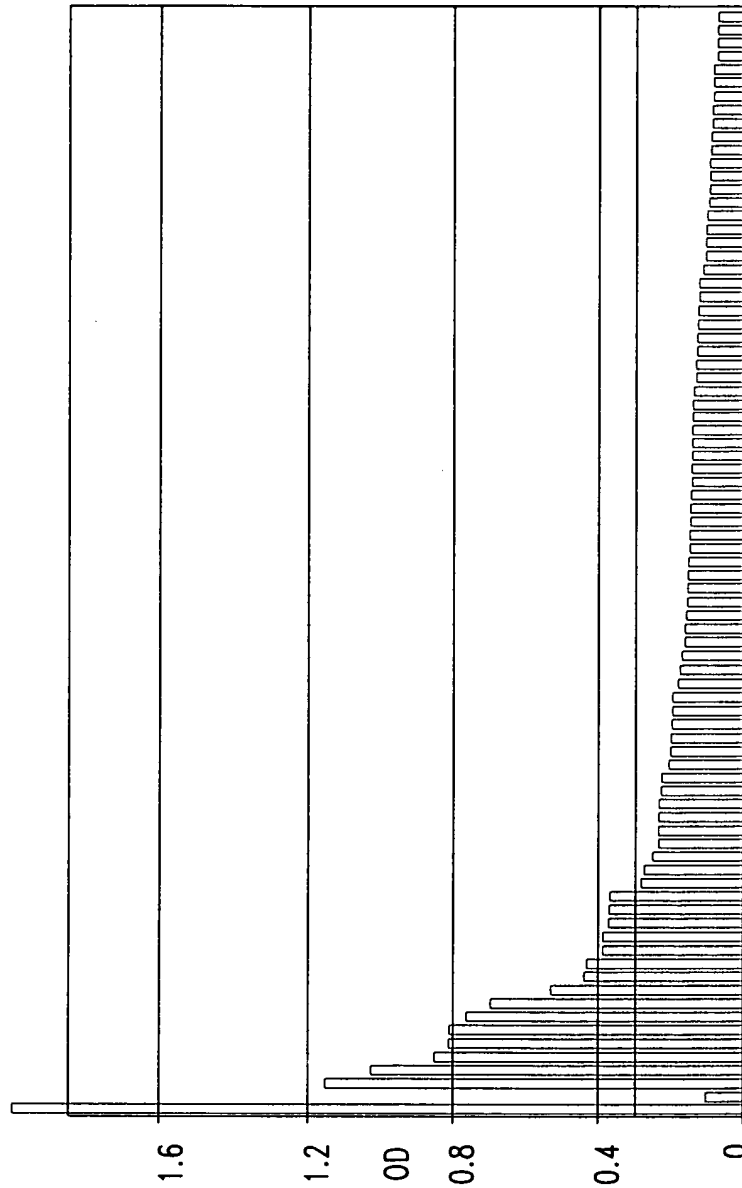


Fig. 16

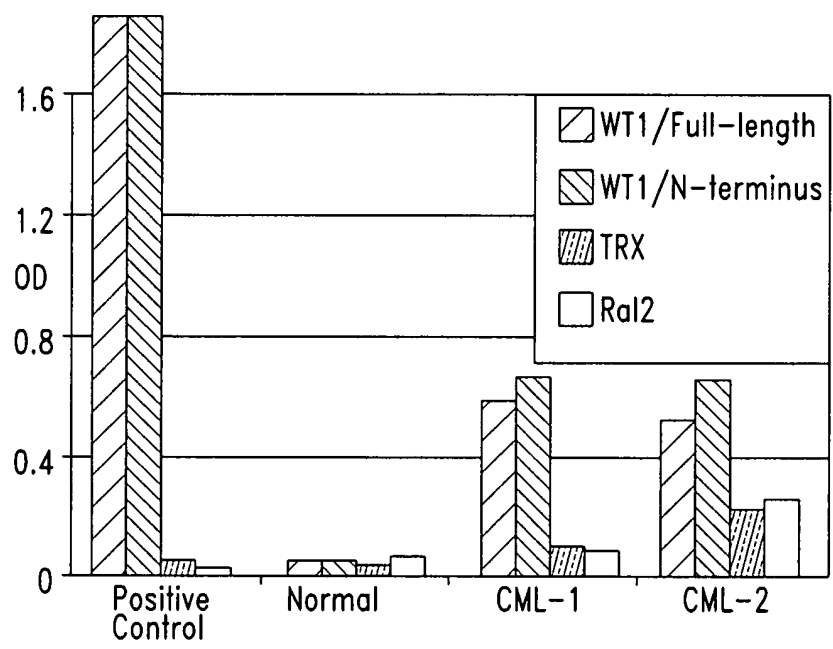


Fig. 17

Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

<u>NAME</u>	<u>Recombinant Protein</u>	<u>WT1 Amino Acid Position</u>	<u>Molecular Weight</u>
WT1/full-length	Ral2-WT1 full length fusion protein	aa 1-449	85kDa
WT1/N-terminus	TRX-WT1 N-terminus fusion protein	aa 1-249	60kDa
WT1/C-terminus	WT1 C-terminus protein	aa 267-449	50kDa

Fig. 18

WT1 Specific Serum Antibodies in Patients with AML and CML

	<u>WT1 /full-length</u>	<u>WT1/N-terminus</u>	<u>WT1/C-terminus</u>
Normal Individuals (n=96)	2/96 (2%)	1/96 (1%)	1/96 (1%)
AML Patients (n=63)	14/63 (22%)	16/63 (25%)	2/63 (3%)
CML Patients (n=81)	15/81 (19%)	12/81 (15%)	3/81 (3%)

Fig. 19